AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS

1. (Previously Presented) Apparatus for applying graphical images onto packaged consumer products, comprising:

a first computer system configured to facilitate the design of graphical images for packaged consumer products;

a second computer system configured to supply instructions to coders for applying graphical images to packaged products; and

a coder configured to apply graphical images onto packaged consumer products;

wherein

the first computer system is configured to generate a generic image data file defining requirements of a graphical image in a generic non-coder-specific format, said requirements including calculation of product specific data, and to communicate said generic image data file to said second computer system, and

the second computer system is configured to:

(i) receive said generic image data file, and a definition of capabilities of said coder;

(ii) process said generic image data file to generate instructions for said coder in dependence of the definition of capabilities of said coder; and

(iii) send said instructions to said coder causing said coder to apply a graphical image to a product such that said graphical image (a) is defined by said generic image data file, and (b) includes calculated product specific data relating to the product as required by the generic image data file.

2.   (Currently Amended)   Apparatus according to claim 1, wherein the first computer system is configured to communicate said generic image data file to said second computer over [[the]] an internet.

3.   (Previously Presented) Apparatus according to claim 1, wherein said generic image data file has a generic non-coder specific format consistent with standards of the extensible mark-up language (XML) recommendations.

4.   (Previously Presented) Apparatus according to claim 1, wherein said generic image data file defines a plurality of fields, and each of said fields specifies generic instructions for a specific portion of the graphical image.

5.   (Previously Presented) Apparatus according to claim 4, wherein one of said fields represents information concerning barcodes.

6.   (Previously Presented)   Apparatus according to claim 1, wherein said calculated product specific data relating to the product is a calculated date.

7.   (Previously Presented) Apparatus according to claim 6, wherein said date is a sell by date or a use by date or a display until date.

8.   (Previously Presented) Apparatus according to claim 6, wherein said coder has a real-time clock, and said coder is configured to calculate said calculated date.

9.   (Previously Presented) Apparatus according to claim 6, wherein said second computer system is configured to calculate said date and supply a character string representing said date to said coder.

TDM/sjr

10.   (Previously Presented) Apparatus according to claim 6, wherein said second computer system is configured to calculate said date, generate a bitmap representation of said date and supply said bitmap to said coder.

11.   (Previously Presented) Apparatus according to claim 1, wherein said calculated product specific data relating to the product is an incremental number.

12.   (Previously Presented) Apparatus according to claim 11, wherein said second computer system calculates said number, generates a character string and instructs a coder to print said character string.

13.   (Previously Presented) Apparatus according to claim 11, wherein said second computer system calculates said number, generates a representation of said number as a bitmap and instructs said coder to print said bitmap.

14.   (Previously Presented) Apparatus according to claim 1, wherein said second computer system is configured to send said instructions to said coder causing said coder to apply a barcode to a product such that said barcode represents said calculated product specific data.

15.   (Previously Presented) Apparatus according to claim 14, wherein said second computer system is configured to generate a character string representing said barcode and supply said character string to a coder such that said coder generates said barcode from said character string.

TDM/sjr

16.   (Previously Presented)   Apparatus according to claim 14, wherein said second computer system is configured to generate a bitmap representing said barcode, and send instructions to said coder which include said bitmap.

17.   (Previously Presented)   Apparatus according to claim 1, wherein said second computer system is configured to receive an instruction to code text, and to instruct said coder to code said text using a font.

18.   (Previously Presented)   Apparatus according to claim 1, wherein said second computer system is configured to receive an instruction to code text; and examine the orientation of said font, instruct said coder to code a font if the orientation is in a preferred direction or said second computer system is configured to generate a bitmap representation of said font if said font is not in a preferred orientation.

19.   (Currently Amended)   Apparatus according to claim 1, wherein said second computer system is configured to: receive an instruction to code text using a font; [[and]] generate a bitmap representation of said font; and download said bitmap to said coder.

20.   (Previously Presented)   Apparatus according to claim 1, configured to apply codes onto packaged consumer products packed individually within first packaging and then further packed into groups of products within second packaging wherein,

said coder is arranged to apply graphical images onto said first packaging,

said system comprises a further coder which is arranged to apply graphical images onto said second packaging,

said second computer system has a store of received generic image data files, and a database of received coder specifications, and

said second computer system is configured to (i) read a first generic image data file from its store of generic image data files, (ii) select a specification for the first coder from

said database of coder specifications, (iii) with reference to said selected specification of said first coder, supply instructions to said first coder such that a first image is coded onto said first packaging, (iv) read a second generic image data file from its store of generic image data files, (v) select a specification for the further coder, and (vi) with reference to said selected specification of said further coder, supply instructions to said further coder such that a second image is coded onto said second packaging, whereby information contained in the first image is consistent with information contained in the second image.

21.   (Previously Presented)   Apparatus for applying codes onto packaged consumer products, wherein said products are packed individually within first packaging and then further packed into groups of products within second packaging, said apparatus comprising:

a first coder which applies information to said first packaging;

a second coder which applies information to said second packaging;

a processing system having a computer system, a store of generic files, and a database of coder specifications;

wherein said generic files comprise generic image data defining images to be applied to packaging, and

said processing system is configured to (i) read a first generic file from its store of generic files, (ii) select a specification for the first coder from said database of coder specifications, (iii) with reference to said selected specification of said first coder, supply first instructions to said first coder such that a first image is coded onto said first packaging, (iv) read a second generic file from its store of generic files, (v) select a specification for the second coder, and (vi) with reference to said selected specification of said second coder, supply second instructions to said second coder such that a second image is coded onto said second packaging, whereby information contained in the first image is consistent with information contained in the second image.

TDM/sjr

22.   (Previously Presented)   Apparatus for applying codes onto packaged consumer products according to claim 21, wherein said generic files define requirements of a graphical image in a generic non-coder-specific format, and said requirements include calculation of product specific data, such that said first instructions cause the first image to include calculated product specific data and said second instructions cause the second image to include the same calculated product specific data.

23.   (Previously Presented)   Apparatus according to claim 21, wherein said apparatus comprises a further computer system configured to facilitate the design of graphical images for packaged consumer products, and the computer system is configured to receive said generic files from said further computer system over the internet.

24.   (Previously Presented)   Apparatus according to claim 21, wherein said generic files have a generic non-coder specific format consistent with standards of the extensible mark-up language (XML) recommendations.

25.   (Previously Presented)   Apparatus according to claim 21, wherein said generic files each define a plurality of fields, and each of said fields specifies generic instructions for a specific portion of the graphical image.

26.   (Currently Amended) Apparatus according to claim [[24]] 25, wherein one of said fields represents information concerning barcodes.

27.   (Previously Presented)   Apparatus according to claim 22, wherein said calculated product specific data relating to the product is a calculated date.

28.   (Previously Presented) Apparatus according to claim 27, wherein said date is a sell by date or a use by date or a display until date.

29. (Previously Presented) Apparatus according to claim 27, wherein one coder of said first and second coders has a real-time clock, and said coder is configured to calculate said calculated date.

30. (Previously Presented) Apparatus according to claim 27, wherein said processing system is configured to calculate said date and supply a character string representing said date to one of said first and second coders.

31. (Previously Presented) Apparatus according to claim 27, wherein said processing system is configured to calculate said date, generate a bitmap representation of said date and supply said bitmap to one of said first and second coders.

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

TDM/sjr

41.   (Previously Presented)   Apparatus according to claim 22, wherein said calculated product specific data relating to the product is an incremental number.

42.   (Previously Presented)   Apparatus according to claim 41, wherein said processing system calculates said number, generates a character string and instructs one of said first and second coders to print said character string.

43.   (Previously Presented)   Apparatus according to claim 41, wherein said processing system calculates said number, generates a representation of said number as a bitmap and instructs one of said first and second coders to print said bitmap.

44.   (Previously Presented)   Apparatus according to claim 22, wherein said processing system is configured to send said instructions to one coder of said first and second coders causing said coder to apply a barcode to a product such that said barcode represents said calculated product specific data.

45.   (Previously Presented)   Apparatus according to claim 44, wherein said processing system is configured to generate a character string representing said barcode and supply said character string to one coder of said first and second coders such that said coder generates said barcode from said character string.

46.   (Previously Presented)   Apparatus according to claim 44, wherein said processing system is configured to generate a bitmap representing said barcode, and send instructions to one of said first and second coders which include said bitmap.

TDM/sjr

47.   (Previously Presented)   Apparatus according to claim 21, wherein said processing system is configured to receive an instruction to code text, and to instruct one of said first and second coders to code said text using a font.

48.   (Currently Amended)   Apparatus according to claim 21, wherein said processing system is configured to: receive an instruction to code text; and examine the orientation of said font text, instruct one of said first and second coders to code a font if the orientation is in a preferred direction or said processing system is configured to generate a bitmap representation of said font if said font is not in a preferred orientation.

49.   (Currently Amended)   Apparatus according to claim 21, wherein said processing system is configured to: receive an instruction to code text using a font; [[and]] generate a bitmap representation of said font; and download said bitmap to one of said first and second coders.

50.   (Previously Presented)   A method of applying graphical images onto packaged consumer products using a coder, comprising the steps of:

storing a definition of capabilities of a coder;

designing graphical images for packaged consumer products within a computer system, thereby generating a generic image data file defining requirements of a graphical image in a generic non-coder-specific format, said requirements including calculation of product specific data;

storing said generic image data file;

reading said stored generic image data file and processing said generic image data file within a computer system to generate instructions for said coder, in dependence of the definition of capabilities of said coder;

supplying said instructions to said coder for applying graphical images to packaged products; and

applying graphical images onto packaged consumer products by said coder,

TDM/sjr

wherein said instructions sent to said coder cause said coder to apply a graphical image to a product such that said graphical image (a) is defined by said generic image data file, and (b) includes calculated product specific data relating to the product as required by the generic image data file.